# Equine Infectious Anemia

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quine infectious anemia is an incurable and infectious, often fatal disease. Horses, ponies, donkeys, asses and other equine family members are vulnerable to infection by the disease-causing virus.

Also known as EIA, other common names for the disease include swamp fever, mountain fever or malarial fever.

An estimated 30 percent to 50 percent of infected animals die within two weeks to four weeks after the onset of clinical signs of EIA.

### Transmission

EIA is spread through blood-toblood contact, not close proximity.

The virus can be transmitted from an infected animal to "clean" equine by unsterilized or contaminated needles, blood transfusions, medical instruments or biting flies. Studies show as few as three horseflies can carry enough virus between animals to cause infection.

EIA has no known cure or vaccine. Infected horses uce antibodies, which cannot

produce antibodies, which cannot rid the body of the disease. The virus can hide and "drift" into various forms, making complete recovery impossible and hampering efforts to create a vaccine.

### Testing

Infection is detected with a blood test drawn by a veterinarian, then processed at the Animal Disease Diagnostic Laboratory at Purdue University or another state/federal approved lab. The Coggins' and CELISA test methods detect EIA virus antibodies in the bloodstream.

### Symptoms

EIA can strike in three forms, depending on an animal's resistance, strength of the virus, and stress factors like weather or physical exertion.

Acute responses generally occur 7 days to 30 days after initial exposure. Horses may develop fever, go off feed, or die suddenly. Eventually, the virus destroys red blood cells, causing severe anemia. Equine in the acute stage may test negative for 16 days to 42 days after exposure, until the animal's immune system has had time to produce detectable antibodies.

**Chronic** infections produce positive tests and classic symptoms: weight loss, weakness, anemia, and swelling of the lower legs, chest and abdomen. Symptoms subside, but may reoccur. Acute episodes can emerge after stress from hard work, hot weather, pregnancy or other disease.

**Inapparent** infections exhibit no

# EIA OR COGGINS'?

The two terms are often used interchangably. Coggins' refers to the most common blood test to detect EIA.

outward symptoms, yet produce positive tests. However, if these horses are stressed, symptoms can appear, and the animals' weakened immune systems may not fight off other diseases. These horses pose the greatest danger of spreading EIA at events or gatherings, because no one suspects the animal has a health problem.

### Identification of Positives

Indiana state law requires all EIA-positive equine be permanently identified with "32A" freeze-branded on the left side of the neck. Permanent identification is designed to protect Indiana's healthy equine population by eliminating confusion about the status of infected animals.

Owners have three options for handling positive animals:

- 1. Permanently quarantine the animal strictly to the owner's premises at least 200 yards from the nearest equine (including those under the same ownership).
- 2. Euthanasia (at the owner's expense) after notification of the State Veterinarian.
- 3. Slaughter, after securing a special permit from the State Veterinarian.

All other equine in the herd must also be tested for EIA.

### Testing of Imports

Under state law, an official health certificate, indicating a negative EIA test (Coggins' or CELISA) within the previous 12 months, must accompany every equine entering Indiana, including those going to market. Only suckling foals accompanied by a dam that has met the EIA test requirement, or horses consigned to immediate slaughter, are exempt from a test.

### Sales and Exhibitions

Likewise, equine entering Indiana directly to a licensed auction market must meet the same requirement. State law requires the auctioneer to announce prior to the sale that the equine is being sold for slaughter only. That fact must also be stated on the bill of sale.

Failure to secure a negative EIA test voids any sale.

While out-of-state equine being exhibited in Indiana must test negative for EIA within the 12 months prior to the event, that requirement is waived for in-state animals. However, individual show/ event coordinators may require a negative test for participants.

For more information about controlling EIA contact the BOAH's Companion Animal/Equine Division at 317/227-0320.

## Indiana State Board of Animal Health

Office of the State Veterinarian 805 Beachway Drive, Suite 50 Indianapolis, IN 46224-7785 317/227-0320; Fax 317/227-0330 animalhealth@boah.state.in.us www.state.in.us/boah

